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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/893,192	LABEEB ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	OMAR PARRA	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 September 2009.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 and 22-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 and 22-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/17/2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 09/17/2009 have been fully considered but they are not persuasive.

Applicant argues that "*Ali does not disclose using one or more hidden or associated program traits*", Remarks, page 9. To this matter, the examiner respectfully disagrees.

As shown on applicant's specification, "*Hidden traits are those which influence a user's viewing habits but which can not be derived from the EPG information. For example,...the strong liking of the sitcom 'Frasier' amongst the set of users who have a strong liking for the sitcom 'Cheers'"*", (Specification page 14, last paragraph or [0085], on the Published version of the application). Ali clearly teaches deriving Hidden traits between programs that can not be determined using EPG information: correlation factors. They represent how each program correlates to another program, calculated

from a set of users' information ([0039]-[0047]; [0062]). The correlation values are tabulated in program pairs. For example, as shown on Ali's paragraph [0039], correlation values or table indicate that 'Friends' is correlated to 'Frasier' in a 60% correlation, while 'Friends' is correlated to 'Seinfeld' in a 30% correlation. These values are calculated based on information of a set users and not from EPG information. Therefore, Ali clearly teaches using hidden program traits in the recommendation of program based on user's profiles.

As can be seen on the claim language, the limitation calls for "... *using one or more hidden or associated program traits*". The nature of the claim language lets the examiner to choose one of the two types of program traits. As shown in the previous action, Ali teaches '*...using one or more hidden program traits*', as shown above.

Even if the examiner had to examine both types of program traits, hidden (as shown above) and associated, the examiner respectfully believes that the art of record still teaches the limitations as claimed.

As argued by the applicant, "*the associated traits of the present invention involve creating a new trait from the observance of a user's viewing habits when combined with other traits. As disclosed in paragraph [0086]:*

*"For example, a user would have a certain liking for any given Seinfeld episode, and a certain liking for any premiere sitcom being aired for the first time. However, its liking for a premiere episode of Seinfeld may be sufficiently large enough to require an additional trait, "new Seinfeld" to fully explain its liking for a premiere episode of Seinfeld."* (emphasis added).

As defined on the specification, page 15 second paragraph: "Associated traits- Traits which have a different influence on a user's viewing habits when combined with

other traits. For example (emphasis added), a user would have a certain liking for any given Seinfeld episode, and a certain liking for any premiere sitcom being aired for the first time. However, its liking for a premiere episode of Seinfeld may be sufficiently large enough to require an additional trait, "new Seinfeld" to fully explain its liking for a premiere episode of Seinfeld".

As shown above, the applicant the applicant cites paragraphs [0086] and [0087] of the specification to show an example of what Associated traits could mean or be applied. As it is well known, 'for example' means 'one of many' and not the actual definition of, in this case, Associated traits. The applicant should point to the definition of the 'Associated traits' shown at the same paragraph and not to the example that follows. As stated above, the examiner respectfully believes that the art of record covers the Associated traits definition, if it was necessary to examine both types of the traits. If the applicant would like the examiner to consider both types of traits, hidden and association, the alternative language ('or') should be changed or removed. Additionally, if the applicant wants to rely on the example given in paragraphs [0086]-[0087], specifics of said example should be included in the claim language.

Ali teaches having 'traits which have a different influence on a user's viewing habits when combined with other traits'. Ali teaches rating a higher value (having a different influence on a user's viewing habits) to 'Friends' by using user's ratings on different traits simultaneously (when combined with other traits), in this case, 'Jennifer Anniston' and 'situation comedy', ([0077]; [0080]).

Therefore, the examiner respectfully believes that the art of record cover all the limitations of applicant's invention as claimed.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **1-20 and 22-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (hereinafter 'Zigmond', Patent No. 6,698,020, of record) in view of Schaffer (Patent No. 7,051,352, of record) in further view of Ali (Pub. No. 2002/0199194).

Regarding claims 1 and 14, Zigmond teaches a method for displaying a TV program to a viewer, comprising:

transmitting/receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership; allowing the viewer to select one of the plurality of received TV programs for viewing; transmitting a plurality of additional programs (col. 7 lines 13-36);

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program; determining viewing preferences using the stored data indicative of the user

selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program, as well as one or more known program traits\_(col. 11 lines 11-30; col. 13 lines 5-28, where the EPG description of the programs help to identify the 'type' of user preferred programs).

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences (Fig. 6; col. 17 lines 10-50; col. 6 lines 6-9).

On the other hand, Zigmond does not explicitly teach storing data indicative of TV programs that were not selected along with data indicative of the viewer selected TV programs and determining viewing preferences using both indicative data.

However, in an analogous art, Schaffer teaches a system and method for adaptively recommending content to a viewer where record is kept or stored of what programs have been watched and total or sample of programs not watched (Fig. 3, col. 2 lines 38-67; col. 3 lines 28-42). Furthermore, Schaffer uses this viewing history (programs watched/not-watched and the characteristics they contain) to calculate or determine viewing preferences (Figs. 6 A-C, col. 4 line 20-col. 5 line 19).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Zigmond's invention with Schaffer's feature of storing data indicative of non-selected TV programs and determine viewing preferences using this data along with data indicative of selected programs for the benefit of having a more close user's viewing preferences determination by '*differentiating between the features of shows that are liked and those that are not liked...*', Schaffer, col. 2 lines 54-59.

Additionally, Zigmond and Schaffer do not explicitly teach using one or more hidden or associated program traits to control the program displayed to the viewer.

However, in an analogous art, Ali teaches a system that selects content for the user based on explicit user inputs ([0031]-[0034]), inferred user preferences based on known program traits (based on the known features of a program, new content is rated and further recommended to users ([0076]-[0080]) and hidden or associated program traits (correlation factors calculated from the ratings and selections of multiple other users which measure the correlation between a pair of programs without using the EPG characteristic of the programs, [0039]-[0047]; [0062]). Ali's system takes the input of thousands of other users and calculates correlation factors that are used to select new content. These correlation factors are found to be good predictors ([0045]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zigmond and Schaffer's invention with the use of program-pairs correlation factors as taught by Ali for the benefit of using the correlation between content to enhance the prediction of content and for the benefit of eliminating or filtering out content to be selected based on the low correlation between a user selected content and a new content ([0663]-[0064]).

Regarding claim 2, the claimed "displaying the viewer selected program and additional programs selected in accordance with the determined viewing" is met as disclosed by Zigmond , wherein 'viewers change the television channel to tune into channels that are broadcasting programming' (column 13, lines 12-19) (claimed "viewer

selected program"), and 'advertisements to be shown to a viewer are selected according to designated criteria in combination with information that characterizes the viewer (claimed "previously determined viewing preferences of the viewer") (column 6, lines 6-9), which are displayed on display [61], Figure 3 and display [58], Figure 4.

Regarding claims 3 and 16, the claimed "the displaying one or more advertisements" is met since 'the user may select one of a plurality of ads' that 'the user is presented with' (Zigmond, column 9, lines 30-31; where in order to receive the plurality of advertisements needs transmission).

Regarding claim 4, the claimed "receiving a plurality of additional programs" is met as discussed in claim 3, since displaying a plurality of advertisements or "additional programs" requires the receiving of the additional programs.

Regarding claim 5, the claimed "selecting one or more of the received additional program in accordance with the previously determined viewing preferences for display to the viewer" is disclosed by Zigmond, wherein 'the user may select one of a plurality of ads' that 'the user is presented with' (column 9, lines 30-31), wherein the 'ads or "additional programs" to be shown to a viewer are selected according to designated criteria in combination with information that characterizes the viewer' (claimed "previously determined viewing preferences of the viewer") (column 6, lines 6-9).

Regarding claims 6 and 17, the claimed “receiving the plurality of programs through one or more broadcast televisions, cable television networks, computer networks, or telephone networks” is disclosed by Zigmond wherein ‘programming is transmitted via any suitable program delivery channel, such as an over-the-air broadcast, a cable provider, a consumer satellite service, telephone lines, via the Internet, or by any other system for transmitting video data’ (column 7, lines 17-21).

Regarding claims 7 ,15 and 18, the claimed “receiving the additional programs independently of the TV programs” is met as shown in Zigmond: figure 4, wherein ad source 62 or “additional programs” and programming source [66] or “or TV programs” are each received independently through streams [64] and [52] respectively.

Regarding claims 8 and 19, the claimed “receiving the plurality of TV programs on a first set of TV channels” and “receiving the plurality of additional programs on a second set of TV channels” is disclosed by Zigmond wherein “advertisement stream 64 may be broadcast on a dedicated channel during a late night period of time when relatively few viewers are watching television” TV programs are on a different channel (column 18, lines 10-15).

Regarding claims 9 and 20, Zigmond discloses “multiplexing advertisement stream 64 into video programming feeds 38 and 39,” (column 18, lines 20-21) which

meets the claimed “receiving the additional programs multiplexed with one or more of the TV programs.”

Regarding claim 10, the claimed “storing the received additional programs for subsequent display to the viewer” is met by Zigmond’s “a local repository having stored therein a plurality of advertisements, from which an advertisement stream 64 is delivered to the ad insertion device” (column 8, lines 2-7), which is later displayed on display [58].

Regarding claim 11, the claimed “displaying the viewer selected program and additional programs selected in accordance with the previously determined viewing preferences of the viewer from among the stored additional programs” is disclosed by Zigmond. wherein ‘viewers change the television channel to tune into channels that are broadcasting programming’ (column 13, lines 12-19) (claimed “viewer selected program”) and “a device such as advertisement repository 86 of FIG. 5 may be used to store the transmitted advertisements for later selection and display” (column 18, lines 1-11).

Regarding claims 12 and 22, the claimed “receiving a plurality of additional programs including targeting parameters related to the previously determined viewing preferences of the viewer” is disclosed by Zigmond wherein the “plurality of additional programs“ are met as discussed in claim 4, and wherein “The viewer and system

information may include data provided by the viewer upon initiation of the services provided by the ad insertion device 80, such as a voluntary survey or questionnaire filled out during the registration process" (column 10, lines 36-48).

Regarding claims 13 and 23, the claimed "targeting parameters include one or more of TV viewing preferences, demographic information, and additional program display schedule information" is disclosed by Zigmund wherein 'advertisements to be shown to a viewer are selected according to designated criteria in combination with information that characterizes the viewer (claimed "viewing preferences"), the content of video programming feed (claimed "additional program display schedule information"), and the geographical location of the household' (claimed "demographic information") (column 6, lines 6-9). Furthermore, "viewer demographic data may be stored in storage location 82, including age, sex, income, preferred language, number of residents, or similar information (claimed "demographic information") (column 10, lines 48-54). Also, "the advertisement parameters include, for example, a description of the content of the advertisement, codes that identify the subject matter of the advertisement, or other mechanisms for characterizing the advertisement so that the advertisement may be displayed to an appropriate segment of the viewing population...the ad selection rules used to match the viewer and system information of storage location 82 or the programming content information of electronic program database 81 with the advertisement parameters associated with the advertisements" (claimed "additional program display schedule information") (column 11, lines 31-49).

Regarding claims 24 and 25, Zigmond, Schaffer and Ali teach wherein the determining viewing preferences comprise determining viewing preferences by performing a regression analysis based on the stored data and the one or more known program traits (Ali: the collaborative analysis takes many users' profiles with data in the past and obtain values that did not exist before the analysis, correlation values, between pairs of programs. This correlation values help to improve the viewer's preference, [0015]; [0039]-[0047]).

Regarding claims 26 and 27, Zigmond, Shaffer and Ali teach wherein performing said regression analysis results in the introduction of one or more additional traits used to improve the determination of the viewer' s preference (Ali: the collaborative analysis takes many users' profiles with data in the past and obtain values that did not exist before the analysis, correlation values, between pairs of programs. This correlation values help to improve the viewer's preference, [0015]; [0039]-[0047]).

5. Claims **28 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (hereinafter 'Zigmond', Patent No. 6,698,020, of record) in view of Schaffer (Patent No. 7,051,352, of record) in view of Ali (Pub. No. 2002/0199194) in further view of Maissel et al. (hereinafter 'Maissel', Pub. No. 2003/0088872).

Regarding claim 28, Zigmond teaches a method for displaying a TV program to a viewer, comprising:

receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership; allowing the viewer to select one of the plurality of received TV programs for viewing; transmitting a plurality of additional programs (col. 7 lines 13-36);

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program; determining viewing preferences using the stored data indicative of the user selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program, as well as one or more known program traits\_(col. 11 lines 11-30; col. 13 lines 5-28, where the EPG description of the programs help to identify the 'type' of user preferred programs);

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences (Fig. 6; col. 17 lines 10-50; col. 6 lines 6-9).

On the other hand, Zigmond does not explicitly teach storing data indicative of TV programs that were not selected along with data indicative of the viewer selected TV programs and determining viewing preferences using both indicative data.

However, in an analogous art, Schaffer teaches a system and method for adaptively recommending content to a viewer where record is kept or stored of what programs have been watched and total or sample of programs not watched (Fig. 3, col. 2 lines 38-67; col. 3 lines 28-42). Furthermore, Schaffer uses this viewing history

(programs watched/not-watched and the characteristics they contain) to calculate or determine viewing preferences (Figs. 6 A-C, col. 4 line 20-col. 5 line 19).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Zigmond's invention with Schaffer's feature of storing data indicative of non-selected TV programs and determine viewing preferences using this data along with data indicative of selected programs for the benefit of having a more close user's viewing preferences determination by '*differentiating between the features of shows that are liked and those that are not liked...*', Schaffer, col. 2 lines 54-59.

Additionally, Zigmond and Schaffer do not explicitly teach using one or more hidden or associated program traits to control the program displayed to the viewer.

However, in an analogous art, Ali teaches a system that selects content for the user based on explicit user inputs ([0031]-[0034]), inferred user preferences based on known program traits (based on the known features of a program, new content is rated and further recommended to users ([0076]-[0080]) and hidden or associated program traits (correlation factors calculated from the ratings and selections of multiple other users which measure the correlation between a pair of programs without using the EPG characteristic of the programs, [0039]-[0047]; [0062]). Ali's system takes the input of thousands of other users and calculates correlation factors that are used to select new content. These correlation factors are found to be good predictors ([0045]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zigmond and Schaffer's invention with the use of program-pairs correlation factors as taught by Ali for the benefit of using the correlation

between content to enhance the prediction of content and for the benefit of eliminating or filtering out content to be selected based on the low correlation between a user selected content and a new content ([0663]-[0064]).

Finally, Zigmond, Schaffer and Ali do not explicitly teach monitoring multiple users, identifying whether a viewer profile has been created for said viewer; creating said viewer profile if said viewer profile has not been created for said viewer;

However, in an analogous art, Maissel teaches an intelligent system that is able to monitor and store data of viewed programs for multiple profiles or users ([0062]; [0090]). The system is able to identify if a viewer is a new viewer and creates a profile for him/her. Viewing information and user's information is stored in said profile ([0226]-[0229]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zigmond, Schaffer and Ali's invention with Maissel's feature of monitoring and storing viewing preference data for multiple viewers for the benefit of expanding and individualizing the system recommendations to all the components of a household.

Regarding claim 29, Zigmond, Schaffer, Ali and Maissel teach further comparing said stored data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected with the profiles created for said plurality of viewers (Schaffer:

(Figs. 6 A-C, col. 4 line 20-col. 5 line 19).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR PARRA whose telephone number is (571)270-1449. The examiner can normally be reached on 9-6 PM (M-F, every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son P Huynh/  
Primary Examiner, Art Unit 2424

OP